

CB/Amelio
soft magnetic layer between the perpendicular orientation promoting underlayer and the perpendicular magnetic recording layer.

6/2
15. (Amended) The perpendicular magnetic recording medium of claim 2, wherein the perpendicular magnetic recording medium has a double-layer structure including a soft magnetic layer between the substrate and the perpendicular orientation promoting underlayer.

16. (Amended) The perpendicular magnetic recording medium of claim 2, wherein the perpendicular magnetic recording medium has a double-layer structure with a soft magnetic layer between the perpendicular orientation promoting underlayer and the perpendicular magnetic recording layer.

6/25 Amelio
17. (New) A perpendicular magnetic recording medium, comprising:
a substrate;
a perpendicular orientation promoting underlayer located on said substrate;
a crystal growth discontinuation layer located on said perpendicular orientation promotion underlayer; and
a perpendicular magnetic recording layer located on said crystal growth discontinuation layer,

wherein said crystal growth discontinuation layer interrupts continuous crystal growth from the perpendicular orientation promoting underlayer to the perpendicular magnetic recording layer while maintaining a perpendicular magnetic orientation effect.

18. (New) The perpendicular magnetic recording medium according to claim 17, wherein the crystal growth discontinuation layer has a thickness of 20 nm or less.

19. (New) The perpendicular magnetic recording medium according to claim 17, further comprising a soft magnetic layer interposed between said substrate an said perpendicular orientation promoting underlayer.

20. (New) The perpendicular magnetic recording medium according to claim 17, further comprising a soft magnetic layer interposed between said perpendicular orientation promoting underlayer and said crystal growth discontinuation layer.

21. (New) The perpendicular magnetic recording medium according to claim 17, further comprising a soft magnetic layer located on said perpendicular orientation promoting underlayer; and a second perpendicular orientation promoting underlayer located on said soft magnetic layer, wherein said soft magnetic layer and said second perpendicular orientation promoting underlayer are interposed between said perpendicular orientation promoting underlayer and said perpendicular magnetic recoding layer.